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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Christian Prehofer

Application No.: 10/517,970   Confirmation No.: 3605

Filed: September 26, 2005   Art Unit: 2617

For: PROACTIVE DEPLOYMENT OF DECISION   Examiner: Naghmeh Mehrpour
      MECHANISMS FOR OPTIMAL HANDOVER

SUPPLEMENTAL AMENDMENT

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

Further to the telephone conference held with Examiner Mehrpour and the undersigned on June 4, 2008, Applicant submits this Supplemental Amendment

Claim Amendments begin on page 2 of this paper.

Remarks/Arguments begin on page 10 of this paper.

IN THE CLAIMS:

Please cancel claims 92 without prejudice or disclaimer.

Please amend the claims as presented below.

Claims 1-48 (Cancelled)

49. (Previously Presented) A method of assisting at least one handover for a mobile device in a mobile communication environment with a plurality of access points, characterized by the steps comprising:

determining an operational context as a profile of applications being executed in the mobile device before or at the time of pro-active deployment of a handover decision mechanism.

proactively deploying the handover decision mechanism in relation to the at least one handover and according to an operational context into a subsystem of the mobile communication environment executing the handover;

identifying at least one candidate access point as input to the proactively deployed handover decision mechanism using existing handover mechanisms; and

determining at least one new access point for the mobile device from the at least one candidate access point using the deployed handover decision mechanism such that the at least one new access point supports the applications running on the mobile devices.

50.   (Previously Presented) A method according to claim 49, characterized in that it further comprises the step to determine a current position of the mobile device as operational context.

51.   (Previously Presented) Method according to claim 50, characterized in that it further comprises the step of predicting a movement of the mobile device as operational context.

52.   (Previously Presented) A method according to claim 51, characterized in that the step of predicting a movement of the mobile device is related to a movement path of the mobile device.

53.   (Previously Presented) A method according to claim 52, characterized in that the step of predicting a movement of the mobile device is further related to a movement speed of the mobile device.

54.   (Previously Presented) A method according to claim 49, characterized in that the profile of applications is related to a group comprising video, still image, audio, text, and speech applications.

55.   (Previously Presented) A method according to claim 49, characterized in that the profile of applications is related to a group comprising interactive, point-to-point, one-way and/or multipoint applications.

56.   (Previously Presented) A method according to claim 49, characterized in that it further comprises the step of determining the operational context of the mobile device as a profile of at least one mobile device user.

57.   (Cancelled)

58.   (Cancelled)

59.   (Previously Presented) A method according to claim 49, characterized in that
       candidate access points are ranked according to dynamic criteria.

60.   (Previously Presented) A method according to claim 59, *characterized in that*
       criteria are selected from a group comprising signal strength, bandwidth,
       supported applications, quality of service, network usage, power consumption.

61.   (Previously Presented) A method according to claim 49, characterized in that the
       handover decision mechanism is deployed into the access point of the mobile
       communication network

62.   (Previously Presented) A method according to claim 49, characterized in that the
       handover decision mechanism is deployed in the mobile device.

63.   (Previously Presented) A method according to claim 49, characterized in that the
       handover decision mechanism is deployed in access point of the mobile
       communication environment and in the mobile device.

64.   (Previously Presented) A method according to claim 49, characterized in that it
       further comprises the step of deploying the handover decision mechanism
       through transfer of code data achieving the determination of the at least one new
       access point for the mobile device.

       65.   (Previously Presented) A method according to claim 49, characterized in
       that it further comprises the step of deploying the handover decision mechanism
       through transfer of criteria for the at least one new access point.

       66. (Previously Presented) A method according to claim 65, characterized in that
       criteria are described as data structure.

67.   (Previously Presented) A method according to claim 49, characterized in that it further comprises the step of un-deploying the handover decision mechanism when it is no more relevant.

68.   (Previously Presented) A method according to claim 49, characterized in that the mobile device is a mobile telephone, a personal digital agent, a portable computer or a hybrid.

69.   (Previously Presented) A method according to claim 49, characterized in that handover is achieved according to a standard selected from a group comprising GSM, PDC, GPRS, PPP, HSCSD, WLAN, HiperLAN, IrDa, Bluetooth, IS 45, IS 95, IMT 2000.

70.   (Previously Presented) A handover assisting apparatus for a mobile device in a mobile communication environment with a plurality of access points, comprising:

an application profile unit adapted to determine an operational context as a profile of applications being executed in the mobile device before or at the time of pro-active deployment of the handover decision mechanism,

a pro-active deployment unit adapted to pro- actively deploying a handover decision mechanism in relation to the at least one handover and according to the operational context into a subsystem of the mobile communication environment executing the handover;

a candidate access point determination unit adapted to identify at least one access point using existing handover mechanisms; and

an access point determination unit adapted to determine at least one new access point for the mobile device from the at least one candidate access point using the deployed handover decision mechanism, such that the at

least one new access point supports the application running of the mobile device.

71.   (Cancelled)

72.   (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that a context determination unit comprises a position unit adapted to determine a current position of the mobile device as operational context.

73.   (Previously Presented) A handover assisting unit according to claim 70, characterized in that a context determination unit further comprises a movement prediction unit adapted to predict a movement of the mobile device as operational context.

74. (Previously Presented) A handover assisting unit according to claim 73, characterized in that the movement prediction unit is adapted to predict a movement of the mobile device according to a movement path.

75. (Previously Presented) A handover assisting unit according to claim 73, characterized in that the movement prediction unit is adapted to predict a movement of the mobile device according to a movement speed.

76.   (Previously Presented) A handover assisting unit according to claim 70, characterized in that the application profile unit is adapted to determine the profile of applications in relation to a group comprising video, still image, audio, text, and speech applications.

77. (Previously Presented) A handover assisting unit according to claim 70, characterized in that the application profile unit is adapted to determine the profile of applications in relation to a group comprising a group comprising interactive, point-to-point, one-way and/or multipoint applications.

78. (Previously Presented) A handover assisting unit according to claim 70, characterized in that the context determination unit further comprises an user profile unit adapted to determine the operational context of the mobile device as a profile of at least one mobile device user.

79. (Cancelled)

80. (Cancelled)

81. (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that the candidate access point determination unit is adapted to rank candidate access points according to dynamic criteria.

82. (Previously Presented) A handover assisting apparatus according to claim 81, characterized in that the candidate access point determination unit is adapted to rank candidate access points according to dynamic criteria selected from a group comprising signal strength, bandwidth, supported applications, quality of service, network usage, power consumption.

83. (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that the context determination unit further comprises a handover type determination unit adapted to select a handover type.

84. (Previously Presented) A handover assisting apparatus according to claim 83, characterized in that the handover type determination unit is adapted to select a network assisted hand over.

85.   (Previously Presented) A handover assisting apparatus according to claim 83, characterized in that the handover type determination unit is adapted to select a mobile device assisted hand over.

86.   (Previously Presented) A handover assisting apparatus according to claim 83, characterized in that the handover type determination unit is adapted to select a combined network assisted and mobile device assisted hand over.

87.   (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that the proactive deployment unit is adapted to deploy the handover decision mechanism through transfer of code data achieving the determination of the at least one new access point for the mobile device.

88.   (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that the proactive deployment unit is adapted to deploy the handover decision mechanism through transfer of criteria for the at least one new access point.

89.   (Previously Presented) A handover assisting apparatus according to claim 88, characterized in that the proactive deployment unit is adapted to transfer criteria according to a data structure.

90.   (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that the proactive deployment unit is adapted to un-deploy the handover decision mechanism when it is no more relevant.

91.   (Previously Presented) A handover assisting apparatus according to claim 70, characterized in that handover is assisted according to a standard selected from a group comprising GSM, PDC, GPRS, PPP, HSCSD, WLAN, HiperLAN, IrDa, Bluetooth, IS 45, IS 95, IMT 2000.

92.   (Cancelled).

REMARKS

Claims 49-56, 59-70, 72-78 and 81-91 are pending in the present application.

Applicant wishes to thank Examiner Mehrpour for the Telephone conference held on June 4, 2008, and the Examiner's indication that the present application is allowable with the above-presented amendments to the claims.

Applicants have cancelled claim 92 herein. Accordingly, Applicant submits that the present application is now in condition for allowance. If the Examiner believes that any outstanding issues can be resolved through a telephone interview, Applicant respectfully requests the Examiner to contact the undersigned at the telephone number provided below.

Applicant believes that no additional fees are due for the subject application. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. 04-1105.

Dated: 6/04/08   Respectfully submitted,

                                   /John J. Penny, Jr./

                                   By_____
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